



**GEM-YEAR TESTING LABORATORY
CERTIFICATE OF INSPECTION**

MANUFACTURER: GEM-YEAR INDUSTRIAL CO., LTD.
 ADDRESS: NO.8GEM-YEAR
 ROAD,E.D.Z.JIASHAN,ZHEJIANG,P.R.CHINA
 PURCHASER: MAPTCO FASTENERS (AUST) PTY LTD
 PO. NUMBER: MAP-2011S
 COMMODITY: ISO 4014 HEX HEAD BOLT HALF THREAD CL 8.8
 SIZE: M16-2.00X110
 LOT NO: 1B2030924
 SHIP QUANTITY: 1,155 PCS
 HEADMARKS: GENIUS SYMBOL & 8.8
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/07/10
 PACKING NO: GEM200521016
 INVOICE NO: GEM/MAP-200713SYD
 PART NO: A911
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 20101474
 MATERIAL: 40ACR
 FINISH: H. T. TRIVALENT ZINC PER ASTM F1941

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	Al%	C%	Cr%	Mn%	P%	S%	Si%
Spec.:MIN.	0.0100	0.4000	0.2000	0.6000			
MAX.		0.4400	0.4000	0.9000	0.0250	0.0250	0.1000
Test Value	0.0200	0.4100	0.2600	0.7700	0.0140	0.0050	0.0600

DIMENSIONAL INSPECTIONS: ACCORDING TO ISO4014-2011 TEST FACILITY : M

SAMPLED BY: ZHONGLI

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	15 PCS	JB/T 9151		109.3000-110.7000 MM	109.4000-110.7000 MM	15	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		23.6700-24.0000 MM	23.7000-24.0000 MM	4	0
MAJOR DIAMETER	4 PCS	JB/T 9151		15.6900-15.9600 MM	15.7000-15.9600 MM	4	0
BODY DIAMETER	4 PCS	JB/T 9151		15.7300-16.0000 MM	15.8000-15.8200 MM	4	0
THREAD LENGTH	15 PCS	JB/T 9151	38		38.1000-38.2000 MM	15	0
HEIGHT	4 PCS	JB/T 9151		9.8200-10.1800 MM	9.8300-10.1800 MM	4	0
SURFACE DISCONTINUITIES	22 PCS	ISO6157.3			PASSED	22	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 26.7500 MM	26.8000-26.8100 MM	4	0
THREAD	4 PCS	JB/T 9151		6h GO 6h NOGO	PASSED	4	0

MECHANICAL PROPERTIES: ACCORDING TO ISO 898.1-2013 TEST FACILITY : M

SAMPLED BY: DAIWENTING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	ISO898.1		Min. 800 N/MM2	940-970 N/MM2	4	0
CORE HARDNESS	15 PCS	ISO898.1		22-32 HRC	27.9-31 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 350 HV	251-280 HV	15	0

ALL TESTS ARE IN ACCORDANCE WITH THE METHODS PRESCRIBED IN THE APPLICABLE ASTM/SAE/ASME. SPECIFICATION. WE CERTIFY THAT THIS DATA IS A TRUE REPRESENTATION OF INFORMATION PROVIDED BY THE MATERIAL SUPPLIER AND OUR TESTING LABORATORY.

THE REPORT IS ISSUED ACCORDING TO ISO16228 F3.1(EN10204 3.1)

TYPE M: MANUFACTURER

TYPE S: SUPPLIER(STEEL MILL,PLATING SUB SUPPLIER,HEAT TREATMENT SUB SUPPLIER ETC.,)

WE CERTIFY THE PARTS ARE ROHS COMPLIANT.

SIGNATURE: